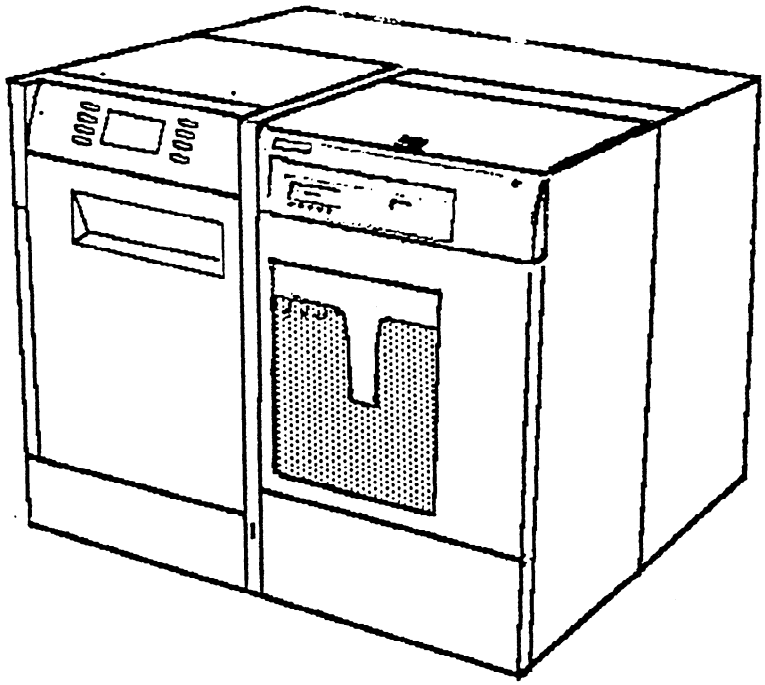
Publication No. WD 3066
4/95

WIRING DIAGRAMS

for the

Kodak MULTILOADER 700 SIDE-BY-SIDE KIT



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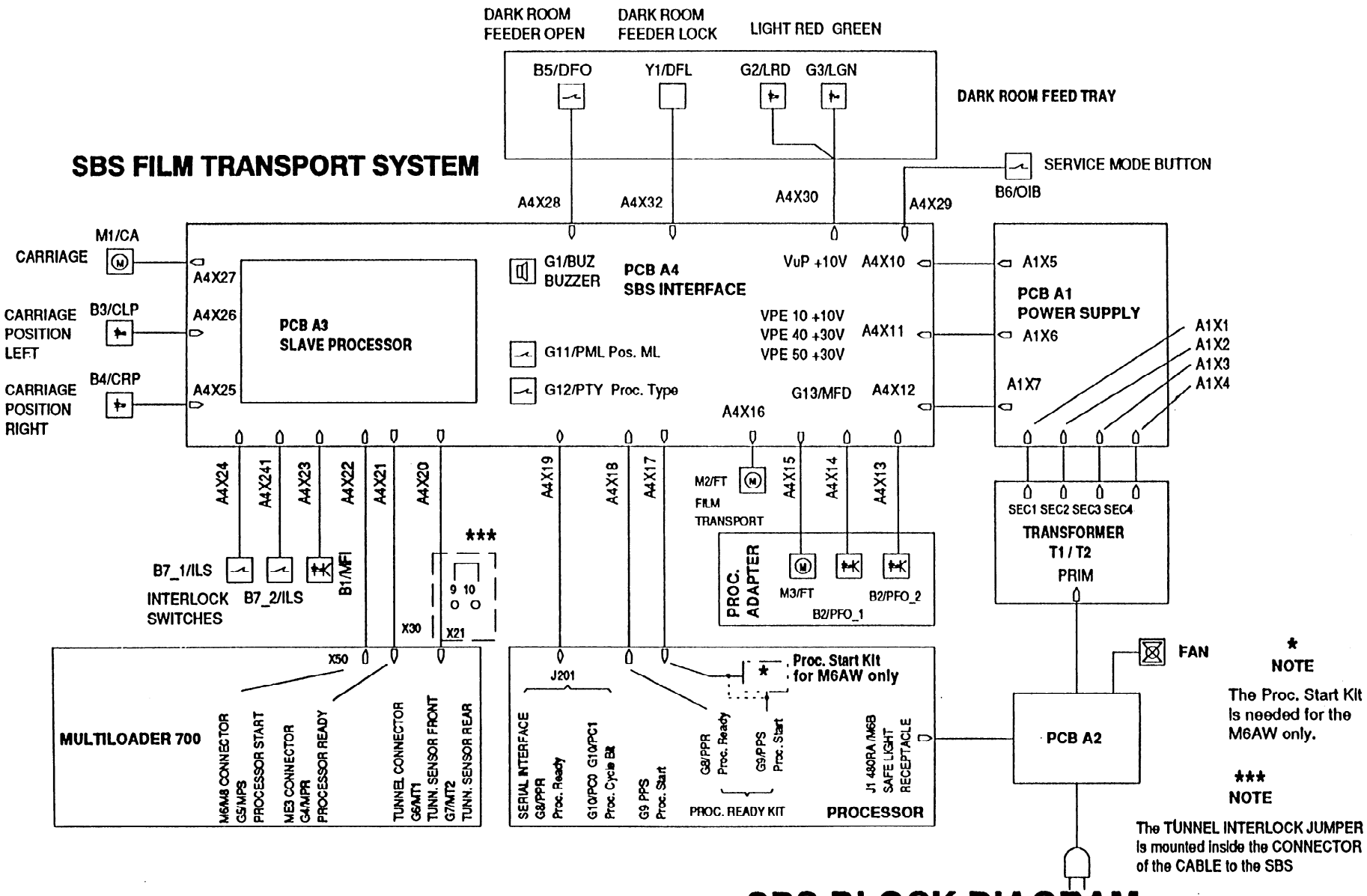
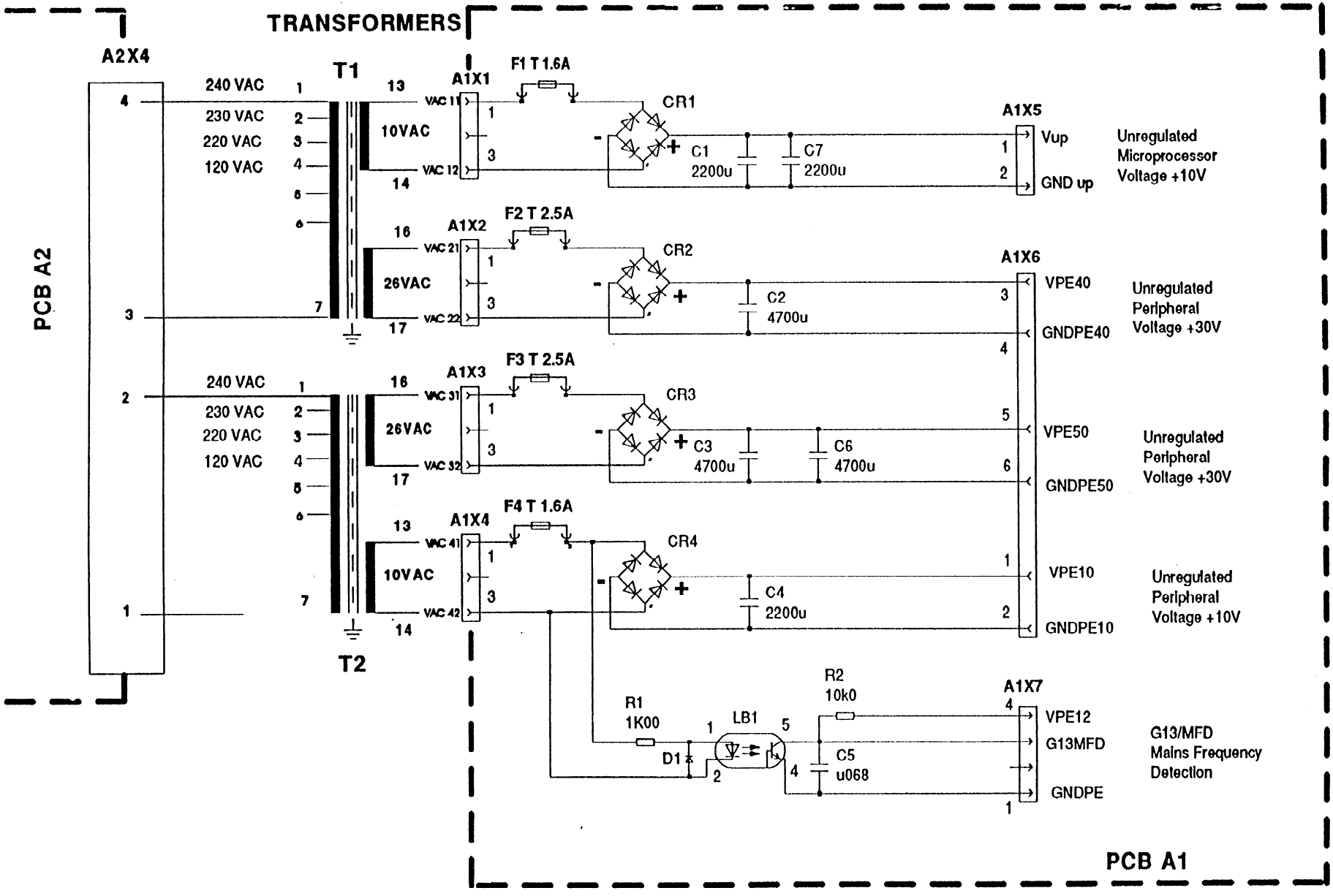
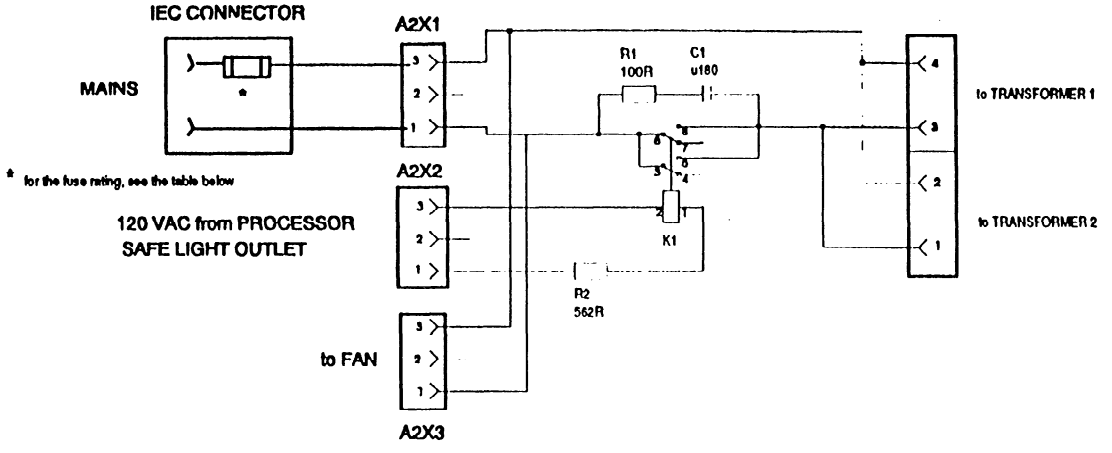
CIRCUIT DIAGRAMS

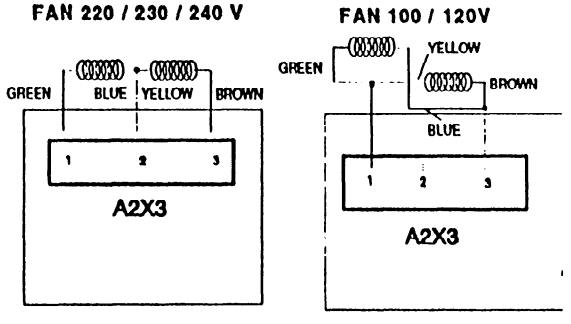


SBS BLOCK DIAGRAM



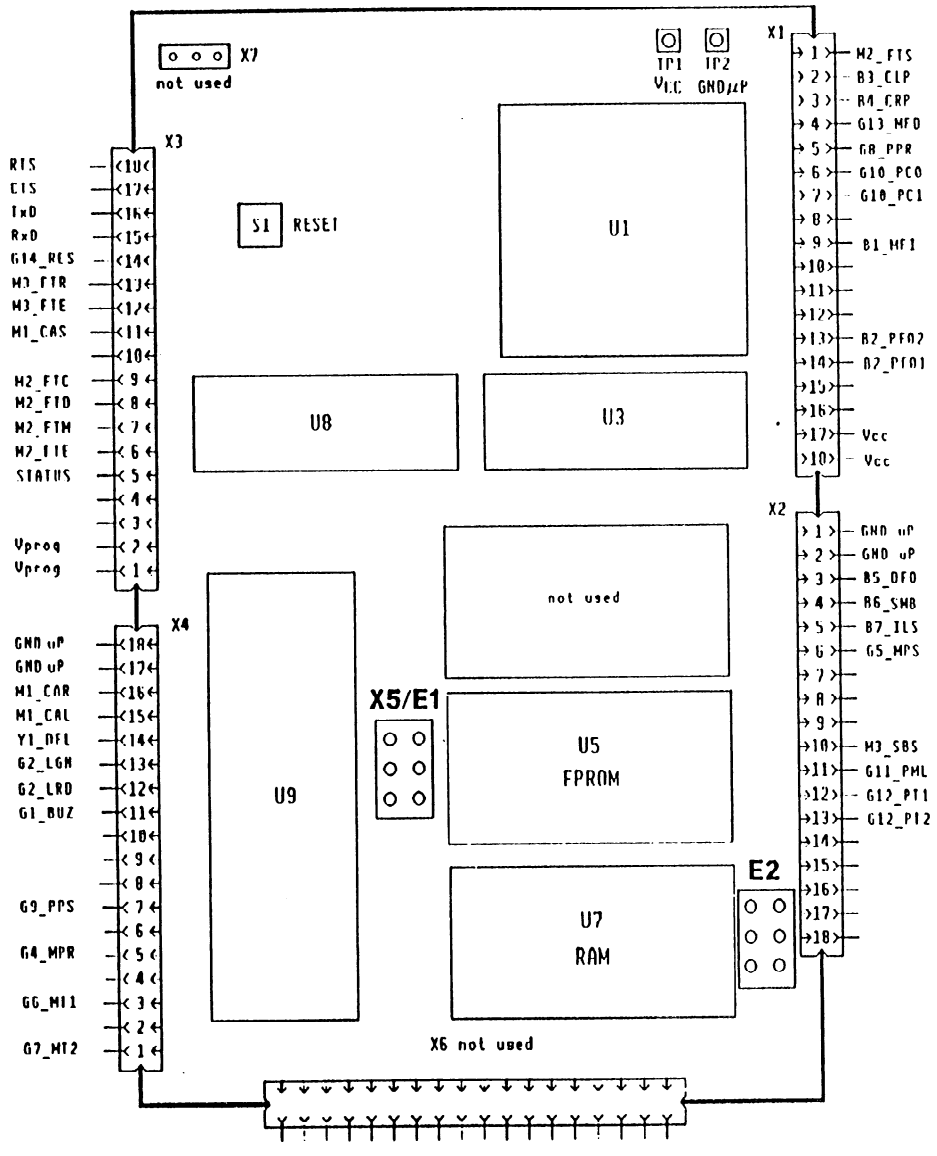
PCB A1 POWER SUPPLY





LINE VOLTAGE	EUROPE	USA / CANADA	OTHER COUNTRIES
100 V	---	---	T 3.15A (IEC)
120 V	---	T 2A (SLOW BLOW)	---
220 V	T 3.15A (IEC)	---	T 3.15A (IEC)
230 V	T 3.15A (IEC)	---	T 3.15A (IEC)
240 V	T 3.15A (IEC)	T 2A (SLOW BLOW)	T 3.15A (IEC)

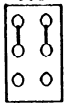
PCB A2



JUMPER SETTING

Layout Version 1

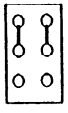
X5 E2

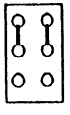


does not exist for this version

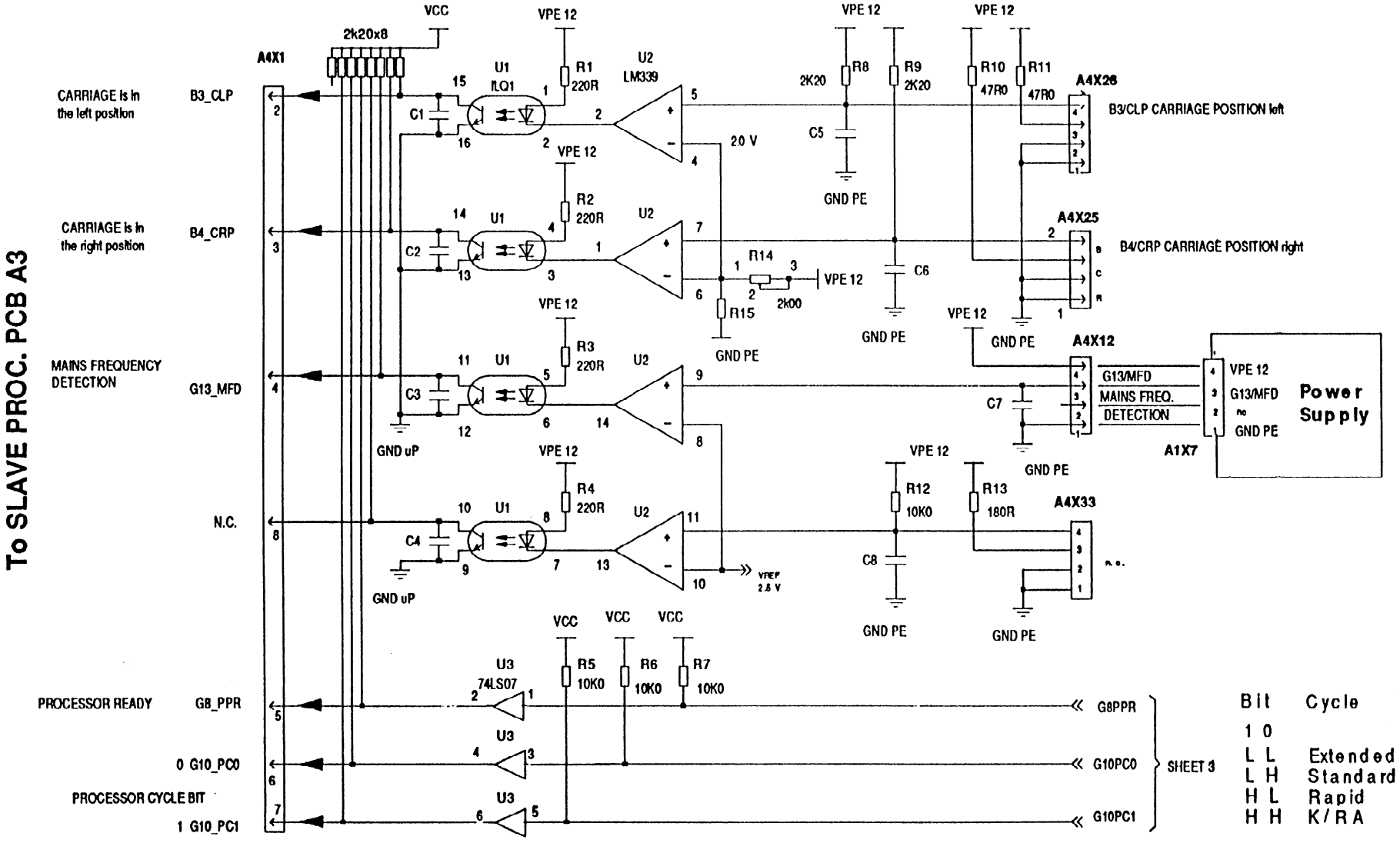
Layout Version 2

E1 E2



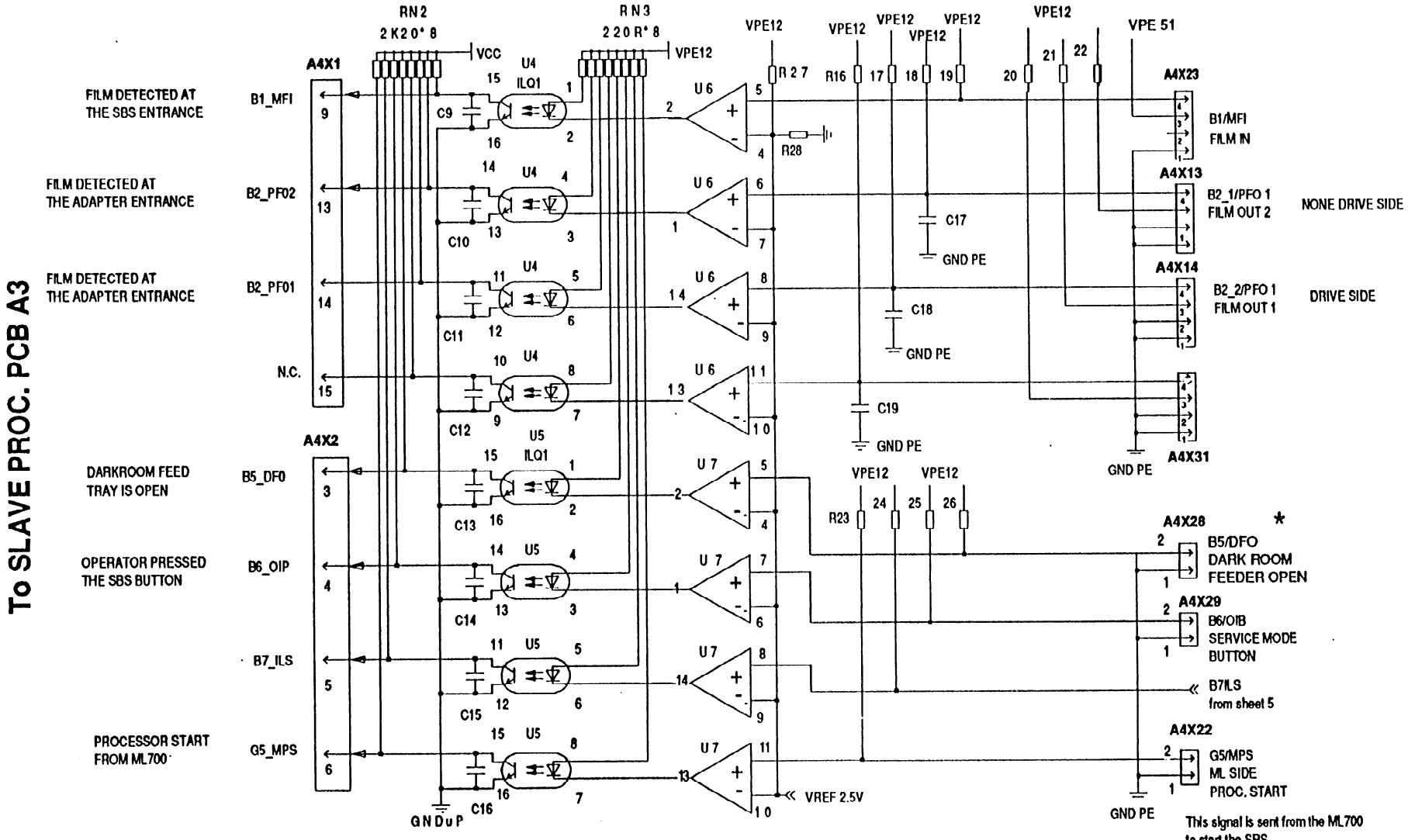


PCB A3



C1.....C8 = u068

PCB A4_1

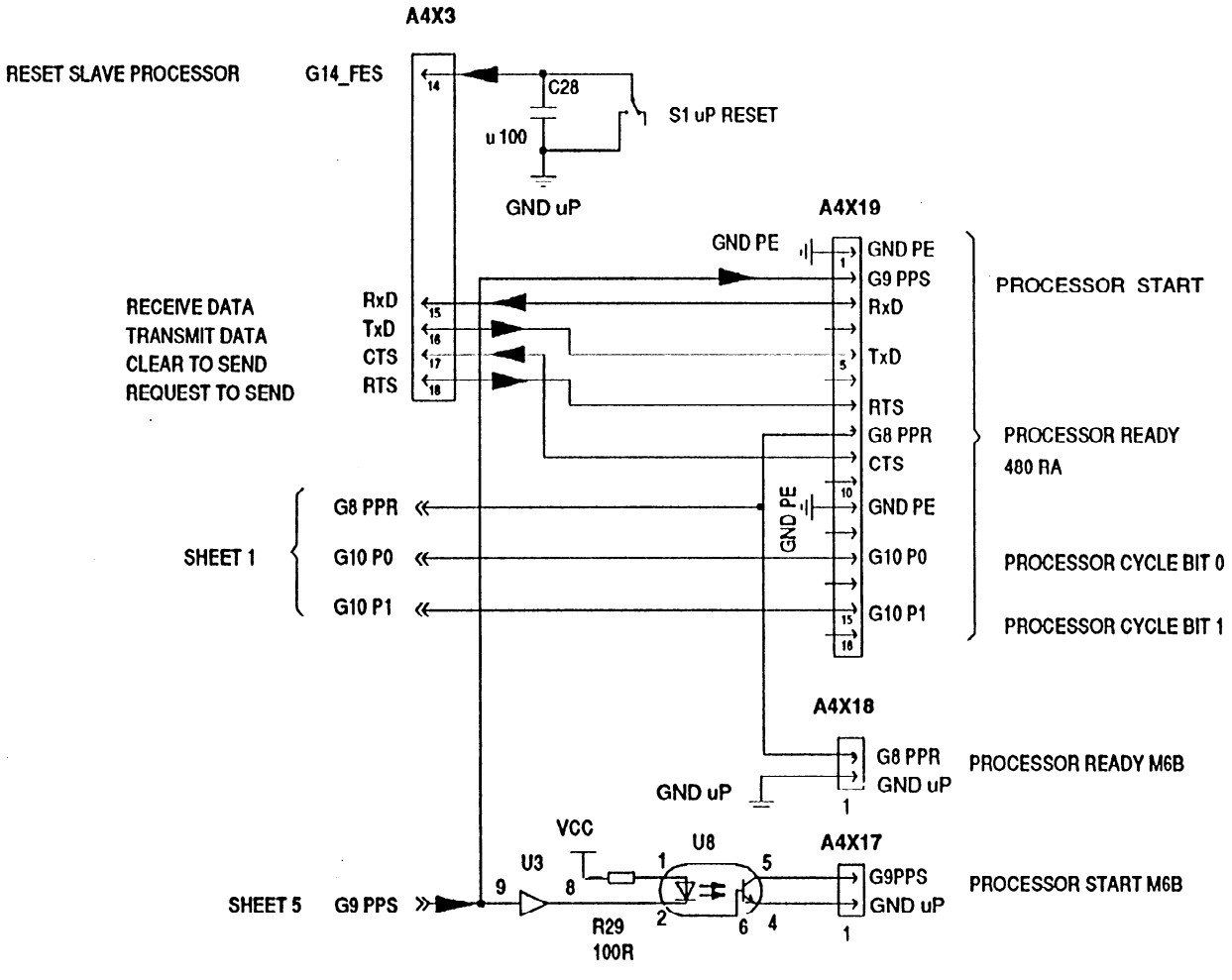


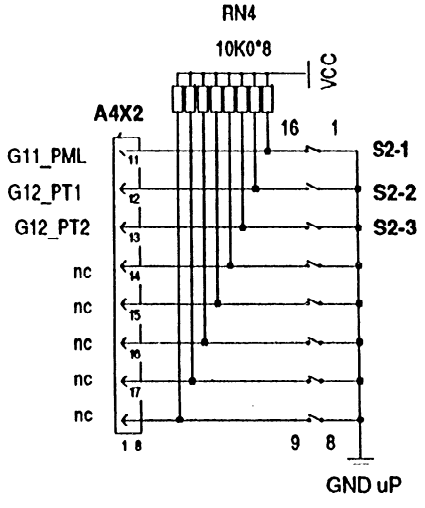
* This SIGNAL is jumpered to GND PE if no DFT is installed

C9.....C18 = u068 **R16...R18 = 27K0** **R20...R22 = 180** **R23...R26 = 10K0** **R27...R28 = 1K00**

PCB A4_2

To SLAVE PROC. PCB A3





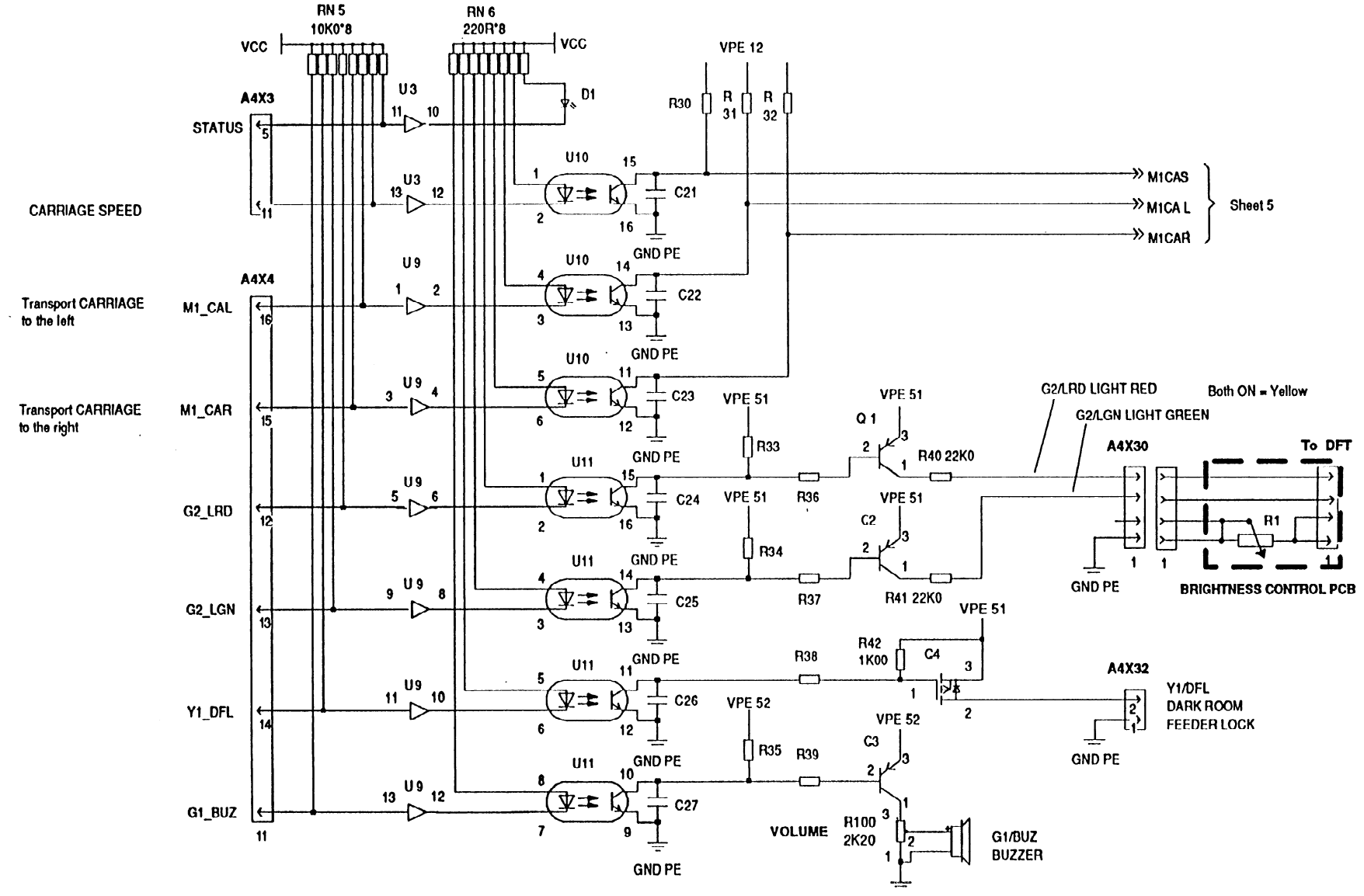
SWITCH SETTING S2

S2-1 ON = ML700 right
S2-1 OFF = ML700 left

S2-2 ON
= 480RA
S2-3 ON

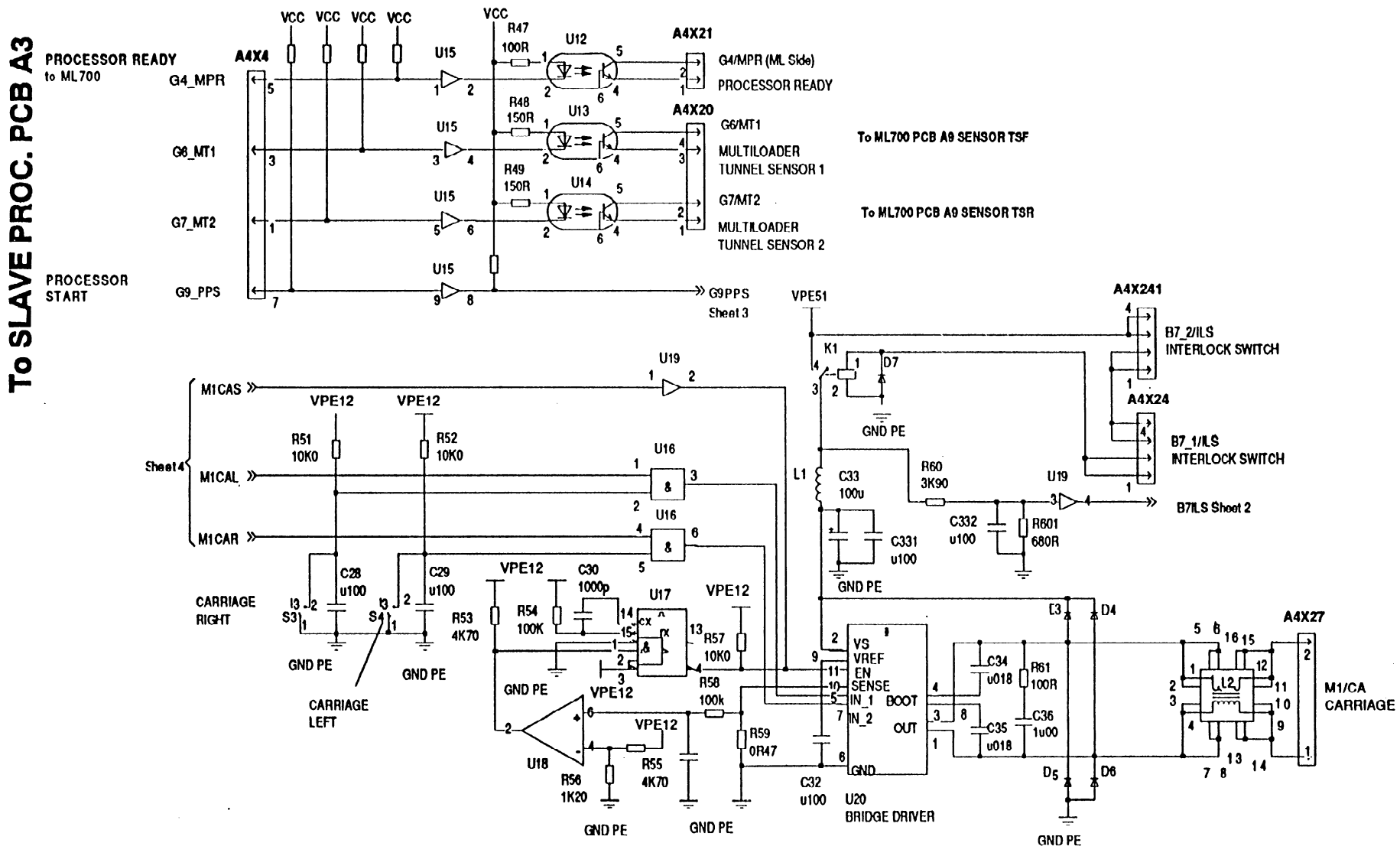
S2-2 OFF
= M6B
S2-3 OFF

PCB A4_3



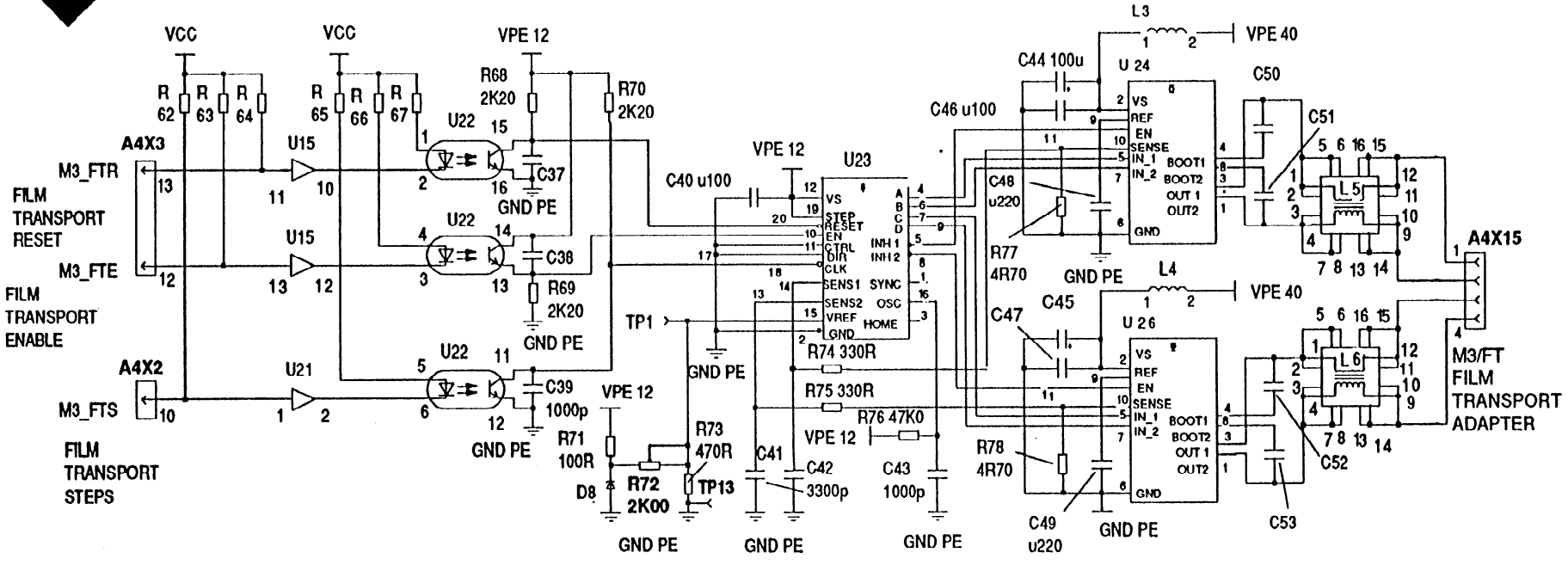
C21... C27 = u068 R30...R39 = 10K0

PCB A4_4


To SLAVE PROC. PCB A3
PROCESSOR READY
to ML700
PROCESSOR START
A4X4
G4_MPR
G6_MT1
G7_MT2
G9_PPS
U15
R47 100R
R48 150R
R49 150R
U12
U13
U14
A4X21
A4X20
G4/MPR (ML Side)
PROCESSOR READY
G6/MT1
MULTILOADER TUNNEL SENSOR 1
G7/MT2
MULTILOADER TUNNEL SENSOR 2
To ML700 PCB A9 SENSOR TSF
To ML700 PCB A9 SENSOR TSR
G9PPS Sheet 3
VCC
VPE51
A4X241
B7_2/ILS INTERLOCK SWITCH
A4X24
B7_1/ILS INTERLOCK SWITCH
B7/LS Sheet 2
K1
D7
GND PE
L1
C33 100u
C331 u100
R60 3K90
C332 u100
R601 680R
U19
M1CAS
M1CAL
M1CAR
Sheet4
VPE12
R51 10K0
R52 10K0
U16
C28 u100
C29 u100
CARRIAGE RIGHT
CARRIAGE LEFT
S3
S4
R53 4K70
C30 1000p
R54 100K
U17
R57 10K0
R58 100k
R59 0R47
U18
R56 1K20
R55 4K70
C32 u100
U20
BRIDGE DRIVER
VS
VREF
EN
SENSE
IN_1
IN_2
BOOT
OUT
GND
C34 u018
C35 u018
R61 100R
C36 1u00
D3
D4
D5
D6
A4X27
M1/CA CARRIAGE
L2

PCB A4_5

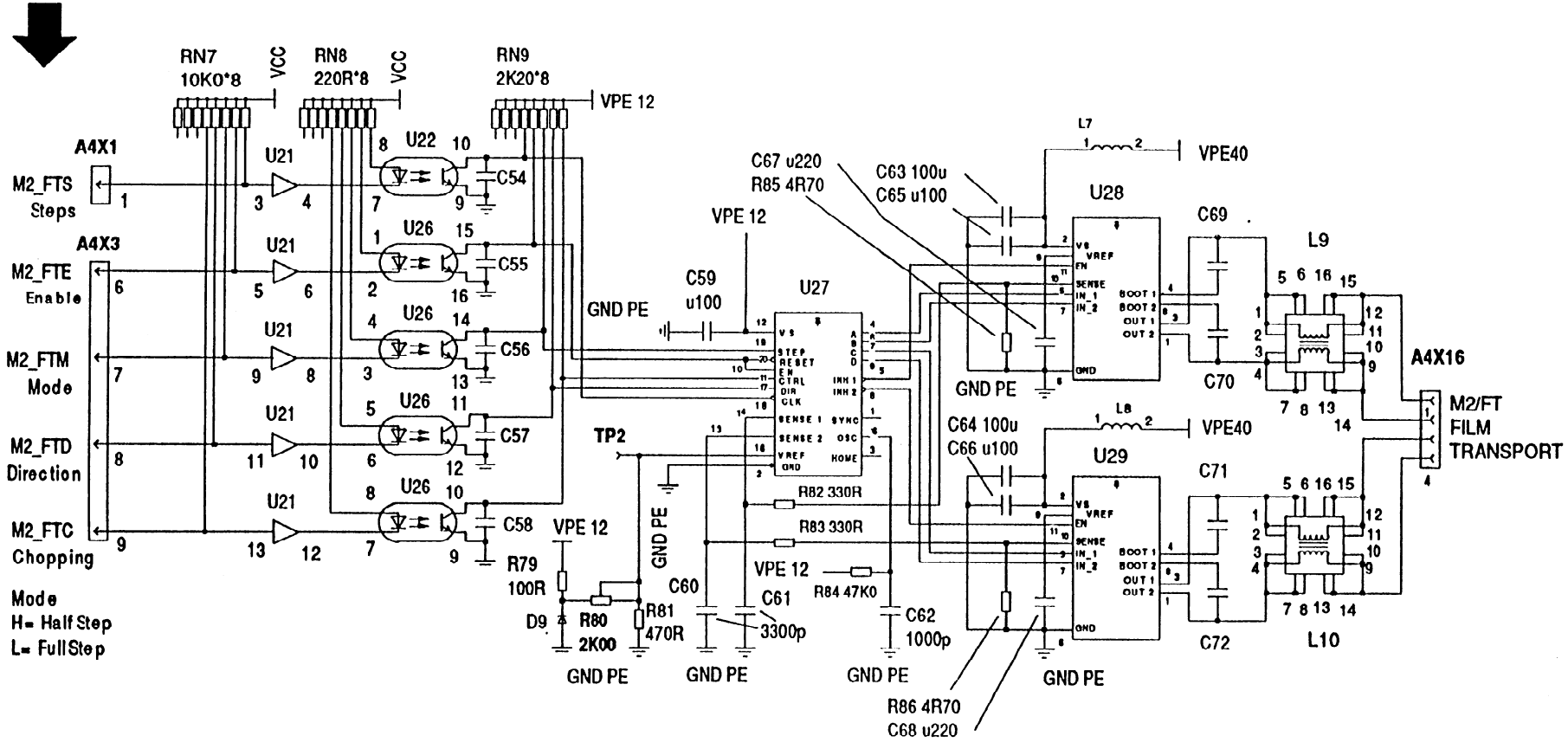
To SLAVE PROC. PCB A3



C37...C38 = u068 C 45 = 100u C47 = u100 C52...C53 = u018 R62...R4 = 10K0 R65...R67 = 220R

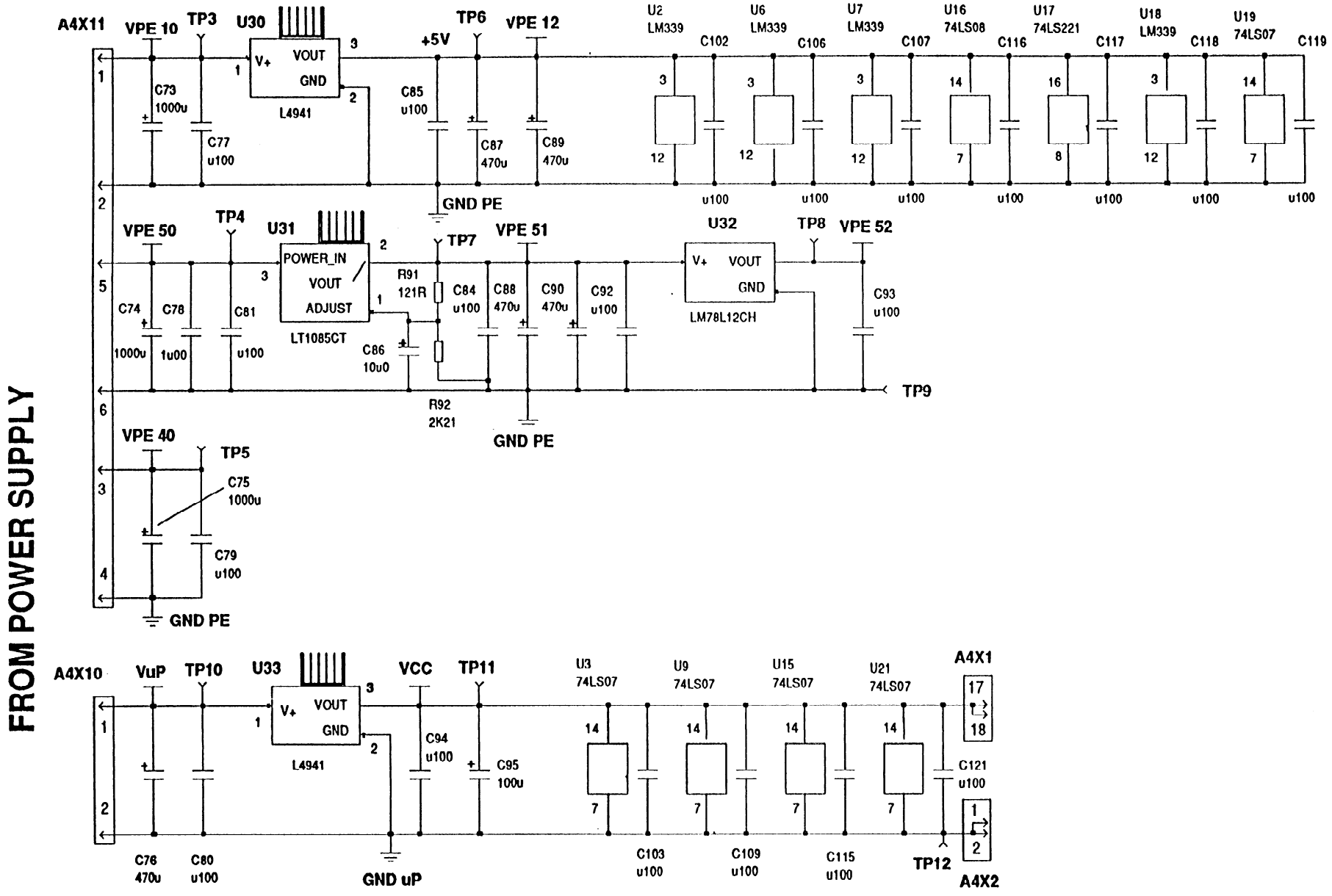
PCB A4_6

To SLAVE PROC. PCB A3

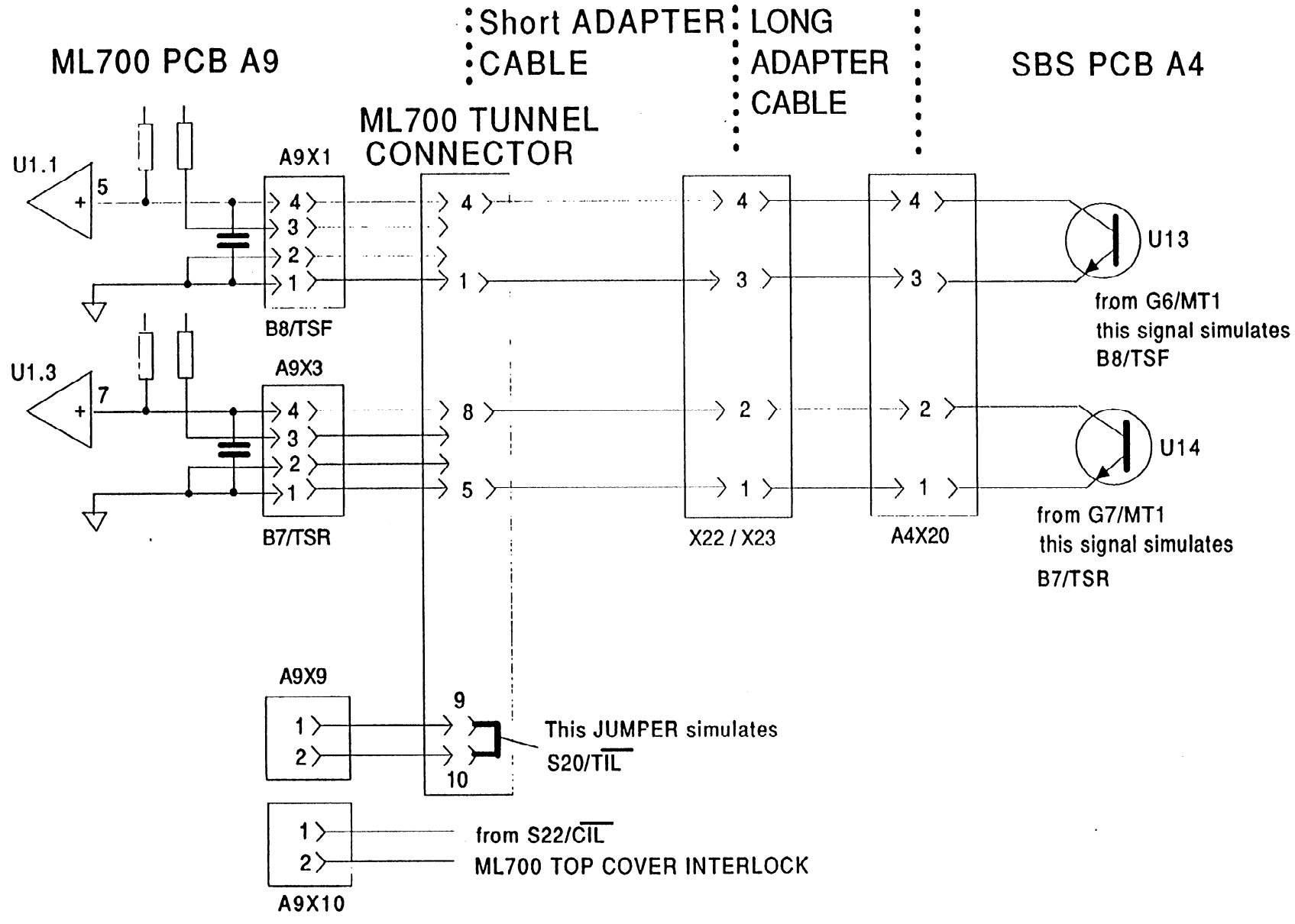


C54...C58 = u068 C69..C72 = u018

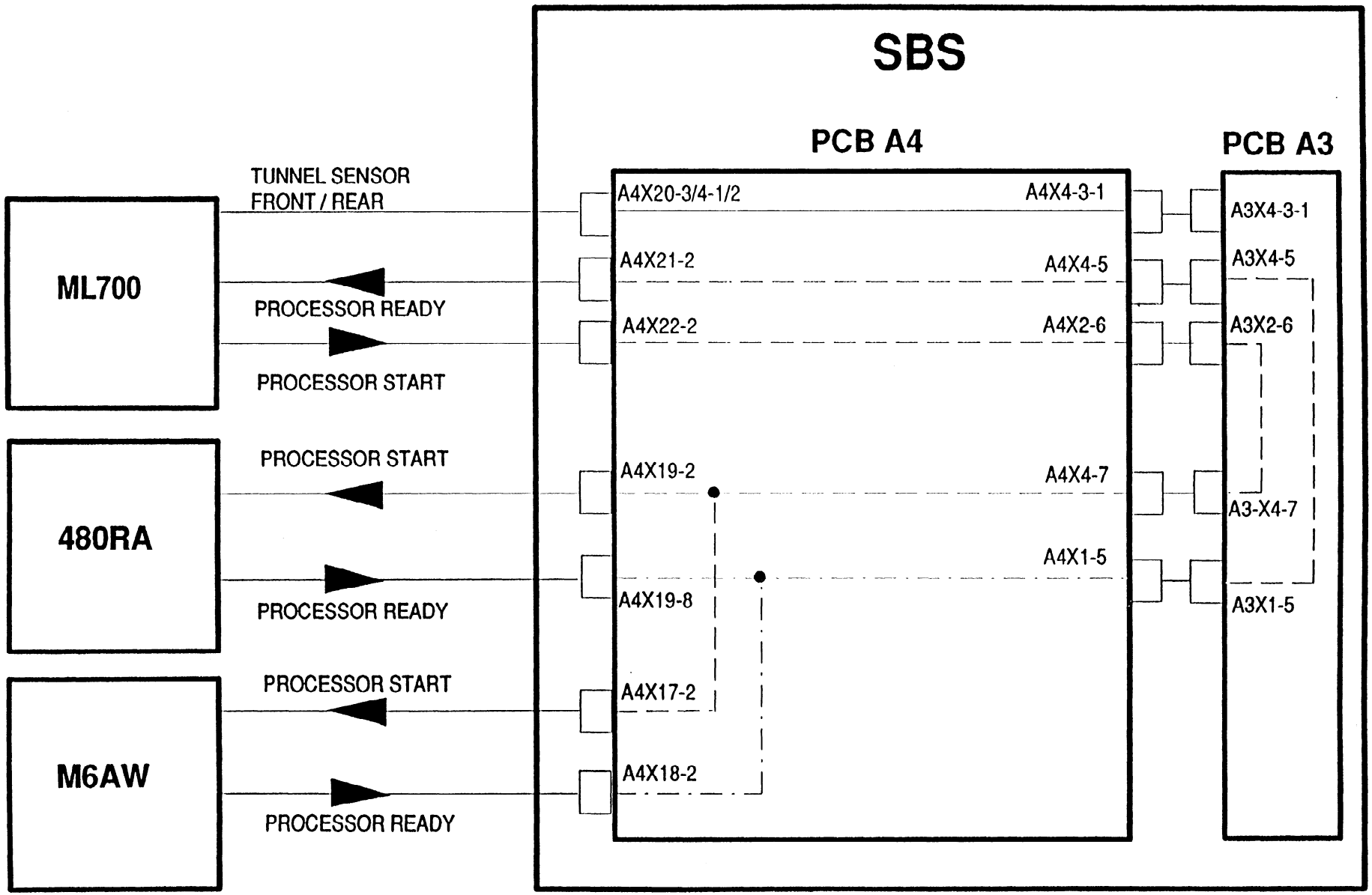
PCB A4_7


FROM POWER SUPPLY
A4X11
VPE 10
TP3
U30
L4941
VOUT
GND
+5V
TP6
VPE 12
C73 1000u
C77 u100
C85 u100
C87 470u
C89 470u
GND PE
U2 LM339
U6 LM339
U7 LM339
U16 74LS08
U17 74LS221
U18 LM339
U19 74LS07
C102
C106
C107
C116
C117
C118
C119
u100
VPE 50
TP4
U31
LT1085CT
POWER_IN
VOUT
ADJUST
TP7
VPE 51
R91 121R
C74 1000u
C78 1u00
C81 u100
C84 u100
C88 470u
C90 470u
C92 u100
C86 10u0
R92 2K21
GND PE
U32
LM78L12CH
TP8
VPE 52
C93 u100
TP9
VPE 40
TP5
C75 1000u
C79 u100
GND PE
A4X10
VuP
TP10
U33
L4941
VCC
TP11
C94 u100
C95 100u
C76 470u
C80 u100
GND uP
U3 74LS07
U9 74LS07
U15 74LS07
U21 74LS07
C103 u100
C109 u100
C115 u100
C121 u100
TP12
A4X1
A4X2

PCB A4_8

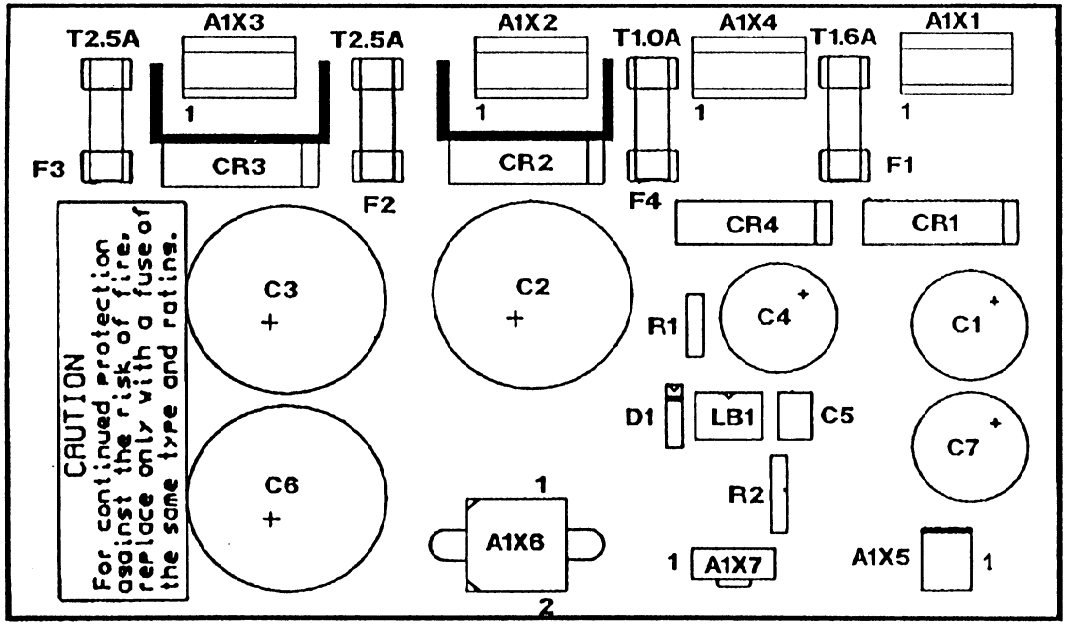


INTERLOCK ML700 --> SBS

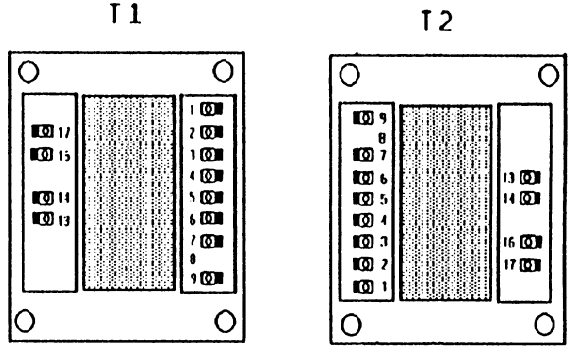


SIGNALS between ML700 and SBS

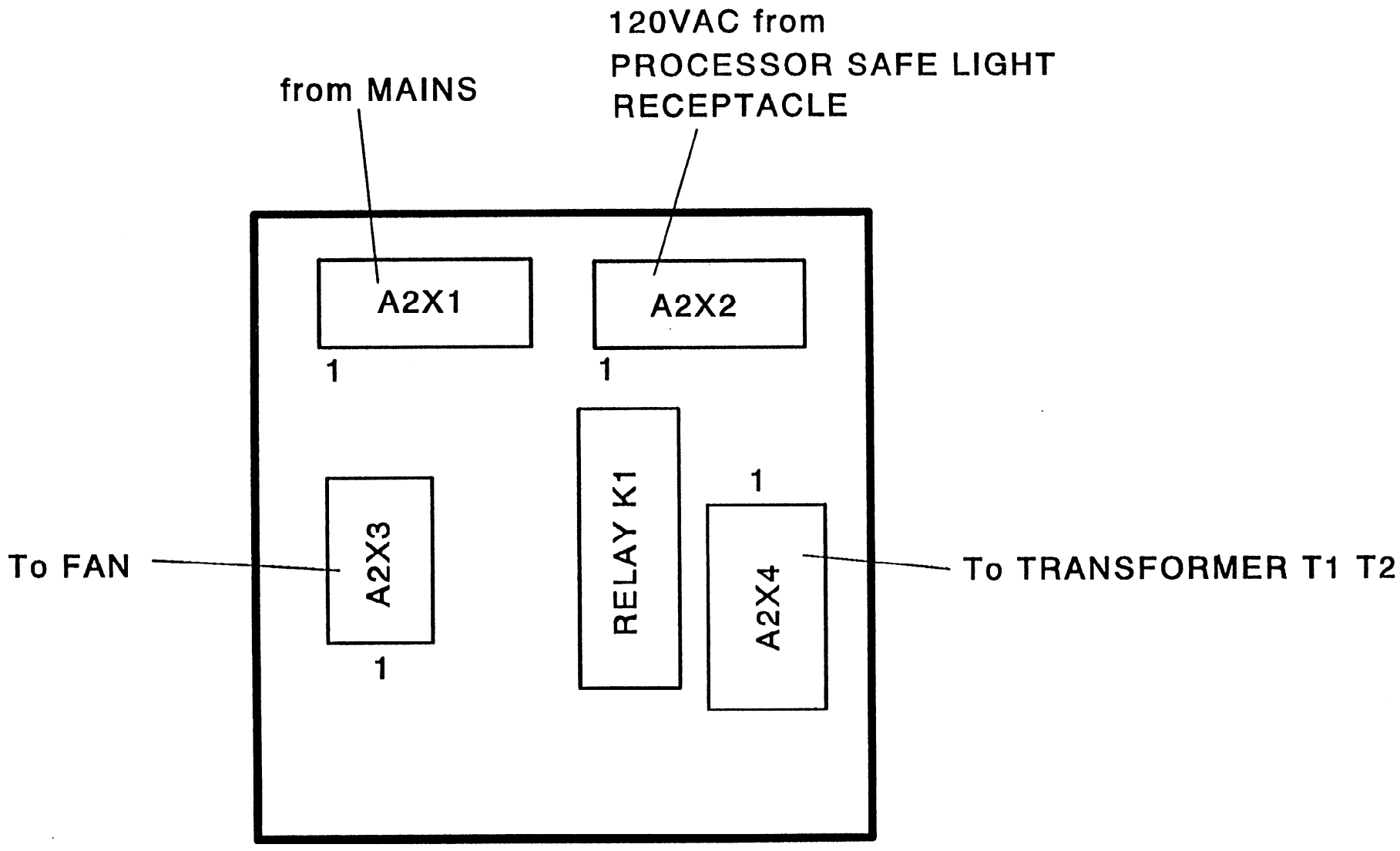
LAYOUTS



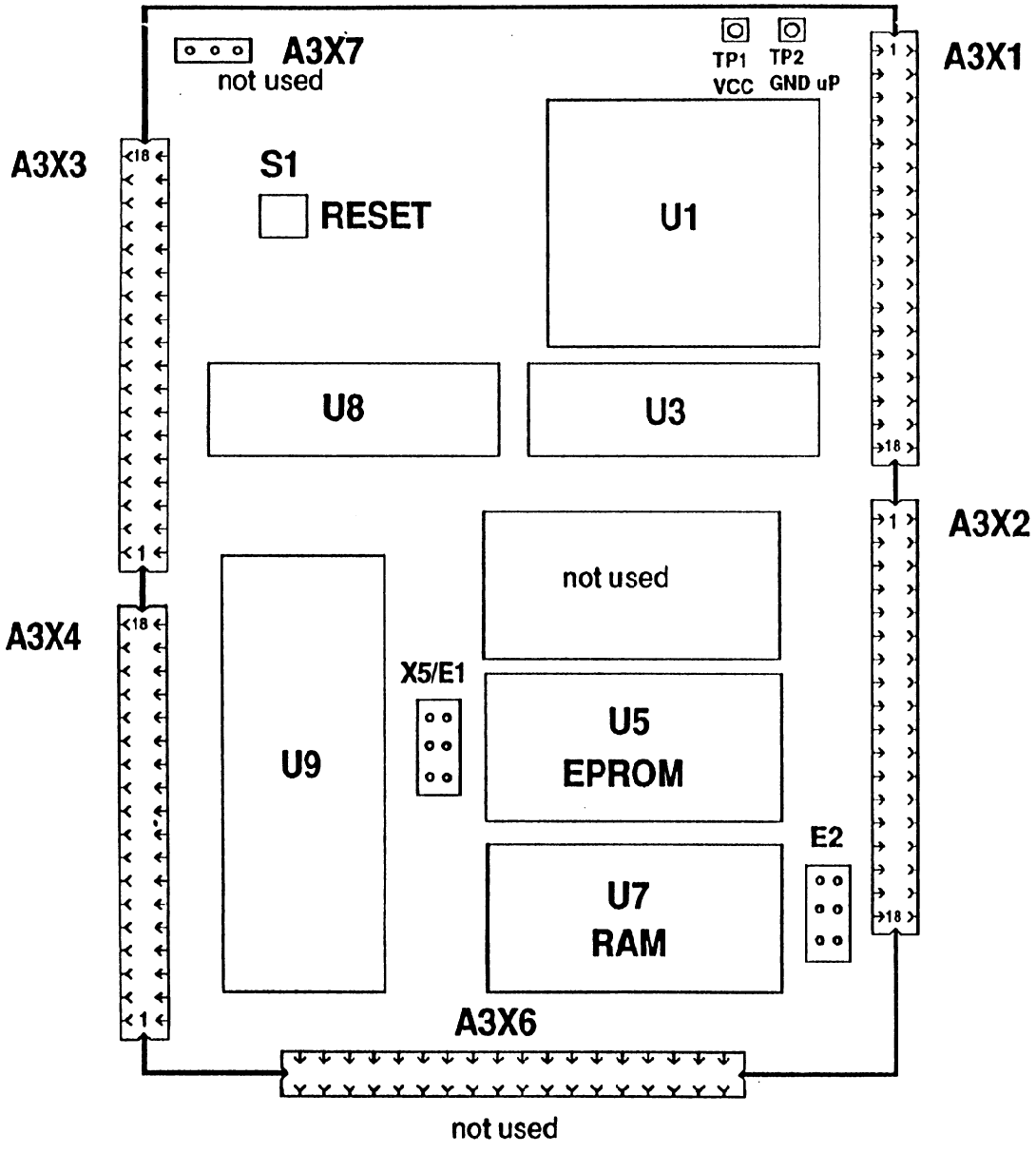
TRANSFORMERS



PCB A1 POWER SUPPLY


120VAC from
PROCESSOR SAFE LIGHT
RECEPTACLE
from MAINS
A2X1
A2X2
1
1
RELAY K1
1
A2X3
A2X4
1
To FAN
To TRANSFORMER T1 T2

PCB A2



JUMPER SETTING

Layout Version 1

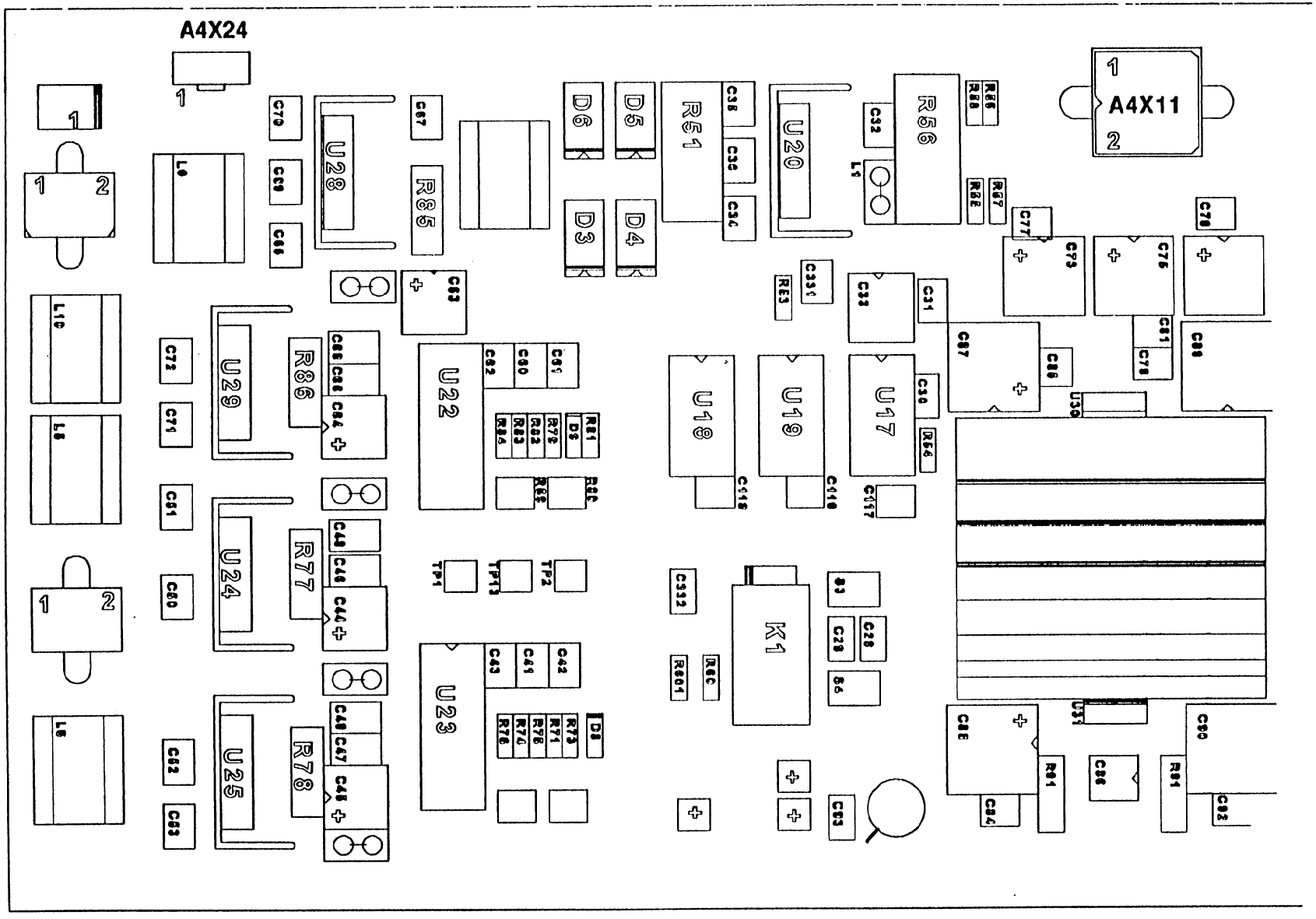
X5 E2

does not exist for this version

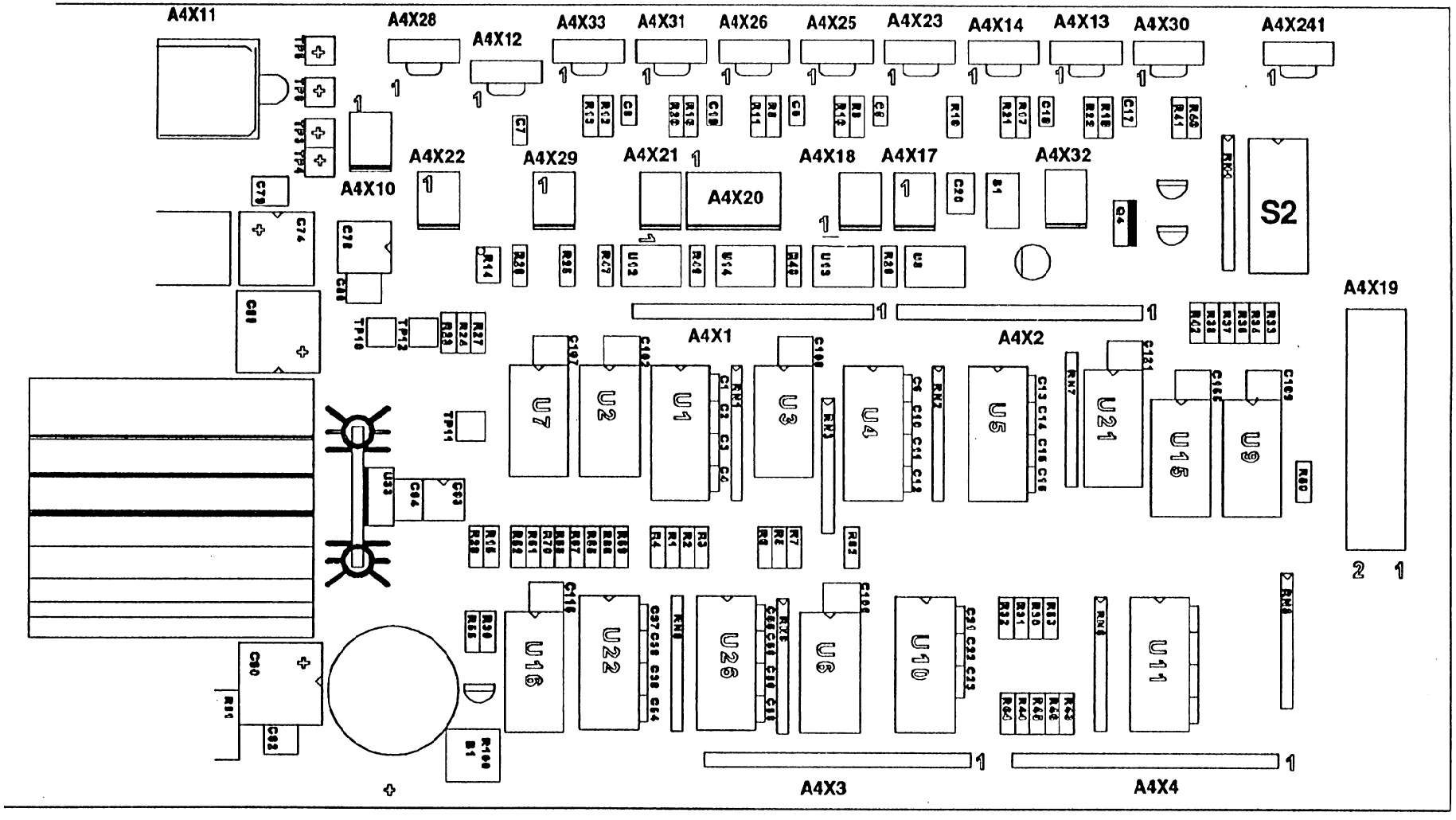
Layout Version 2

E1 E2

PCB A3


A4X24
A4X27
A4X16
A4X15
A4X11
U28
U29
U24
U25
U22
U23
U18
U19
U17
U20
R56
R51
R85
R86
R77
R78
K1
D6
D5
D3
D4

PCB A4 left


A4X11
A4X28
A4X12
A4X33
A4X31
A4X26
A4X25
A4X23
A4X14
A4X13
A4X30
A4X241
A4X10
A4X22
A4X29
A4X21
A4X20
A4X18
A4X17
A4X32
S2
A4X19
A4X1
A4X2
A4X3
A4X4
U7
U2
U1
U3
U4
U5
U21
U15
U9
U16
U22
U26
U6
U10
U11
2 1

PCB A4 right

SIGNAL LIST

SIGNAL NAME	FROM	TO	SHOWN ON	ORIGIN	DESCRIPTION
B1_MFI	A4X1_9	A3X1_9	PCB A4_2	B1/MFI FILM IN	SENSOR B1 detects the LEADING EDGE and the TRAILING EDGE of the FILM entering the SBS
B2_PF01	A4X1_14	A3X1_14	PCB A4_2	B2_1/PF01 FILM OUT 1 DRIVE SIDE	SENSOR B2_1 in the PROCESSOR ADAPTER detects if the ADAPTER ENTRANCE ROLLERS are separated by a FILM.
B2_PF02	A4X1_13	A3X1_13	PCB A4_2	B2_1/PF02 FILM OUT 2 NONE DRIVE SIDE	SENSOR B2_1 in the PROCESSOR ADAPTER detects if the ADAPTER ENTRANCE ROLLERS are separated by a FILM.
B3_CLP	A4X1_2	A3X1_2	PCB A4_1	B3/CLP CARRIAGE LEFT POSITION	SENSOR B3 detects the left-hand SBS CARRIAGE position.
B4_CRP	A4X1_3	A3X1_3	PCB A4_1	B4/CRP CARRIAGE RIGHT POSITION	SENSOR B4 detects the right-hand SBS CARRIAGE position.
B5_DFO	A4X2_3	A3X4_2	PCB A4_2	B5/DFO DARK-ROOM FEED TRAY OPEN	SENSOR B5 detects if the DARK ROOM FEED TRAY is open or closed.
B6_SMB	A4X2_4	A3X2_4	PCB A4_2	B6/SMB SERVICE MODE BUTTON	SWITCH S6 is used to enter the SERVICE MODE.
B7_ILS	A4X2_5	A3X4_5	PCB A4_2	B7_1/B7_2 ILS INTERLOCK SWITCH	Switch B7_1 and B7_2 are REED CONTACTS. They are made if the SBS COVER is correct in place.
CTS	A4X3_17	A3X3_17	PCB A4_3	PROCESSOR	CTS (CLEAR TO SEND) is a RS 232 handshake signal between PROCESSOR and SBS.
G1_BUZ	A3X4_11	A4X4_11	PCB A4_4	PCB A3	This signal is used to switch on/off the SBS BUZZER.
G2_LRD	A3X4_12	A4X4_12	PCB A4_4	PCB A3	This signal turns on the red LED. This LED is located in the DARK ROOM and indicates that the DFT must not be used.

SIGNAL NAME	FROM	TO	SHOWN ON	ORIGIN	DESCRIPTION
G2_LGN	A3X4_13	A4X4_13	PCB A4_4	PCB A3	This signal turns on the green LED. This LED is located in the DARK ROOM and indicates that the DFT can be used.
G4_MPR	A3X4_5	A4X4_5	PCB A4_5	PCB A3	If the SBS AND the PROCESSOR work ok, the MPR (PROCESSOR READY) signal is sent to the ML700
G5_MPS	A4X3_6	A3X2_6	PCB A4_2	ML700	As soon as the CASSETTE is in the ML700, the MPS (PROCESSOR START) signal is send to the SBS. This starts the SBS.
G6_MT1	A3X4_3	A4X4_3	PCB A4_5	PCB A3	This signal simulates the TSF (TUNNEL SENSOR FRONT)SENSOR which is connected to PCB A9 of the ML700.
G7_MT2	A3X4_1	A4X4_1	PCB A4_5	PCB A3	This signal simulates the TSR (TUNNEL SENSOR REAR) SENSOR which is connected to PCB A9 of the ML700.
G8_PPR	A4X1_5	A3X1_5	PCB A4_1	480RA7270RA/M6B	This is the PROCESSOR READY signal from the PROCESSORS 480RA/270RA/M6B
G9_PPS	A3X4_7	A4X4_7	PCB A4_4	PCB A3	This is the PROCESSOR START SIGNAL for the PROCESSORS 480RA/270RA/M6B
G10_PC0 G10_PC1	A4X1_6 A4X4_7	A3X1_6 A3X4_7	PCB A4_1	PROCESSOR	PROCESSOR CYCLE BIT 0/1. The bit combination gives the cycle of the PROCESSOR (ext., standard, rapid, k/ra).
G11_PML	A4X2_11	A3X4_11	PCB A4_3	S2 of PCB A4	The PML signal indicates, wether the ML700 is left or right of the PROCESSOR.
G12_PT1 G12_PT2	A4X2_12 A4X2_13	A3X4_12 A3X2_13	PCB A4_3	S2 of PCB A4	The combination of PT1 and PT2 indicates to which PROCESSOR the SBS is hooked up.

SIGNAL NAME	FROM	TO	SHOWN ON	ORIGIN	DESCRIPTION
G13_MFD	A4X1_4	A3X1_4	PCB A4_1	POWER SUPPLY	The SBS detects automatically if the system is running with 50 or 60 Hz. According to the detected frequency the SBS motor speed is set to the correct value.
G14_RES	A4X3_14	A3X3_14	PCB A4_3	S1 of PCB A4	This is the RESET BUTTON.
M1_CAL	A3X4_16	A4X4_16	PCB A4-4	PCB A3	This signal causes MOTOR M1 to transport the SBS CARRIAGE to the right.
M1_CAR	A3X4_15	A4X4_15	PCB A4_4	PCB A3	This signal causes MOTOR M1 to transport the SBS CARRIAGE to the left.
M1_CAS	A3X3_11	A4X3_11	PCB A4_4	PCB A3	This signal sets the speed of MOTOR M1.
M2_FTC	A3X3_9	A4X3_9	PCB A4_7	PCB A3	This signal sets the chopping mode for STEPPER MOTOR M2.
M2_FTD	A3X3_8	A4X3_8	PCB A4_7	PCB A3	This signal sets STEPPER MOTOR M2 to forward or backward.
M2_FTE	A3X3_6	A4X3_6	PCB A4_7	PCB A3	This signal enables the STEPPER MOTOR CONTROLLER U27.
M2_FTM	A3X3_7	A4X3_7	PCB A4_7	PCB A3	This signal selects between half step/full step mode.
M2_FTS	A3X1_1	A4X1_1	PCB A4_7	PCB A3	This is the step signal to drive MOTOR M2 step after step.
M3_FTE	A3X3_12	A4X3_12	PCB A4_6	PCB A3	This signal enables the STEPPER MOTOR CONTROLLER U23.
M3_FTR	A3X3_13	A4X3_13	PCB A4_6	PCB A3	This signal resets the STEPPER MOTOR CONTROLLER U23.

SIGNAL NAME	FROM	TO	SHOWN ON	ORIGIN	DESCRIPTION
M3_FTS	A3X2_10	A4X2_10	PCB A4_6	PCB A3	This is the step signal to drive M3 step after step.
RTS	A3X3_18	A4X3_18	PCB A4_3	PCB A3	RTS (REQUEST TO SEND) is a RS232 handshake signal between SBS and PROCESSOR.
RxD	A4X3_15	A3X3_15	PCB A4_3	PROCESSOR	RxD (RECEIVE DATA) is the RS232 data line from the PROCESSOR to the SBS.
STATUS	A3X3_5	A$X3_5	PCB A4_4	PCB A3	Indicates if PCB A3 is running.
TxD	A3X3_16	A4X3_16	PCB A4_3	PCB A3	TxD (TRANSMIT DATA) is the RS232 data line from the SBS to the PROCESSOR.
Y1_DFL	A3X4_4	A4X4_4	PCB A4_4	PCB A3	This signal energises SOLENOID Y1 in the DFT as long as the green LED G2-LGN is on. If the red LED G2_LRD is on, Y1 is denergised and the DFT is locked.

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